

BD Select™ CHO

*Novel, **high yield CHO media**
that stands out from the crowd.*



Helping all people
live healthy lives





 **BD Select™ CHO Medium
without L-Glutamine**
For Manufacturing Use

 37°C
 Zn

 Becton, Dickinson and Company
Sparks, MD 21152 USA

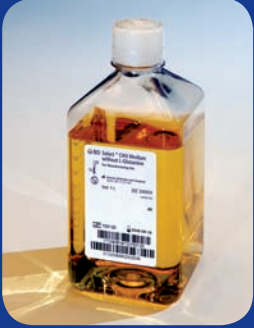
Vol: 1 L REF 220253
L009841(02)

069

LOT 7G0120  2008-06-19

(17)080819(10)7G0120
(01)00382902202535

Catalog No: 220253



Advantages of using BD Select™ CHO

- Breakthrough production yield, achieved through proprietary optimization of both base medium and supplements
- Ready to use — requires no additional supplementation
- Designed to meet rigorous quality and regulatory needs
 - Animal component free
 - cGMP 21 CFR 820 manufacturing
 - Drug Master File in development

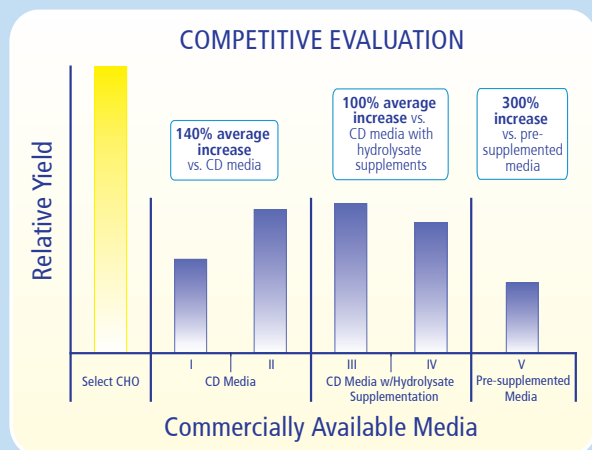
Novel, high yield CHO media that stands out from the crowd



Higher yields are an ever-increasing requirement for the cell culture industry. Until now, the industry has typically added hydrolysates to a chemically defined medium to improve process yields. However, the success of this approach has been limited due to the fact that the medium has typically not been optimized for hydrolysate supplementation, nor has the hydrolysate been optimized for use in a particular medium formulation.

BD has addressed this critical market need through its AutoNutrient™ Media Design Service (AMDS) by developing a novel, high yield medium for CHO cells — BD Select™ CHO.

Breakthrough production yield has been achieved through a proprietary optimization of both base medium and supplements.



Media Development Process:

Studies have shown that media and supplement choices are critical to achieving increased production goals while meeting regulatory requirements. Combining the proven methods of the BD AutoNutrient Media Design Service (AMDS) with over 100 years experience in hydrolysate supplementation, BD has developed a new formulation that eliminates the need for further optimization. BD Select CHO combines a robust base medium with hydrolysate supplementation designed specifically for biopharmaceutical production processes. This combination has resulted in a unique, high performance CHO medium that is ready for immediate use.

BD Select CHO was developed by the BD AMDS group using Design of Experiments (DOE) developed specifically for biopharmaceutical cell lines. These unique DOEs allow for a large number of conditions to be evaluated quickly in a disciplined, logical manner. By using DOEs specifically designed for these applications, the optimal balance of nutrients can be achieved quickly and accurately, thereby resulting in a novel, high yield formulation.

In any optimization involving hydrolysates, the identification of a good base medium is a critical first step. Once the optimized base medium was selected, a variety of hydrolysates were selected based upon their suitability to be included in a biopharmaceutical process. In the initial DOE study, these hydrolysates were screened with a panel of CHO lines. From this study, several hydrolysate supplementation options were identified for further evaluation (Figure 1). Through the iterative DOE process, the potential different supplementation candidates were narrowed down to four (Figure 2). These four were screened through an expanded panel of CHO lines representing a variety of selection systems (Figure 3). In the end, Candidate XI was selected based upon superior performance across various CHO cell lines including GS, DHFR, NEO and other selection systems (Figure 4). Through this optimization process, BD Select CHO was identified as a novel, high yield medium with broad applicability across CHO lines.

FIGURE 1
Medium Optimization Process Step #1
Initial Hydrolysate DOE Screen

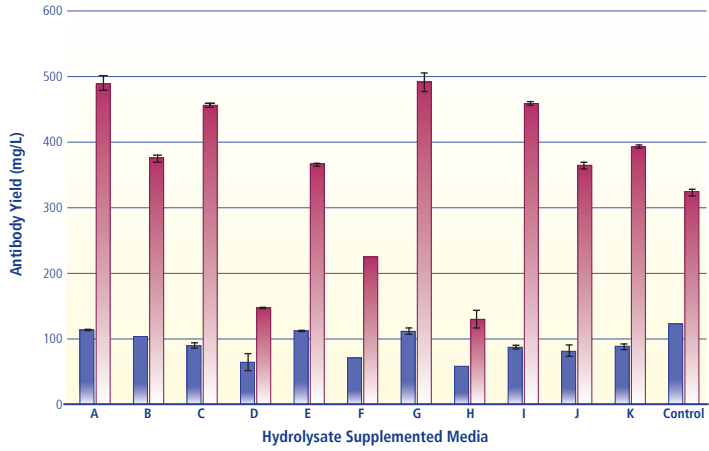


FIGURE 2
Medium Optimization Process Step #2
Final Hydrolysate DOE Screen

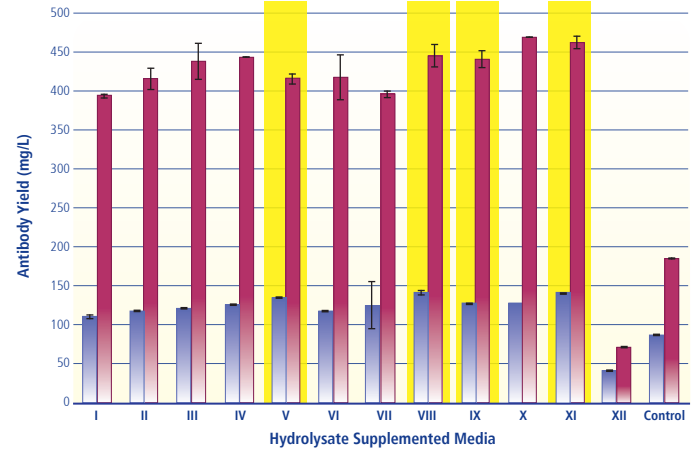


FIGURE 3
Medium Optimization Process Step #3
Media Candidate Screen with Expanded CHO Panel

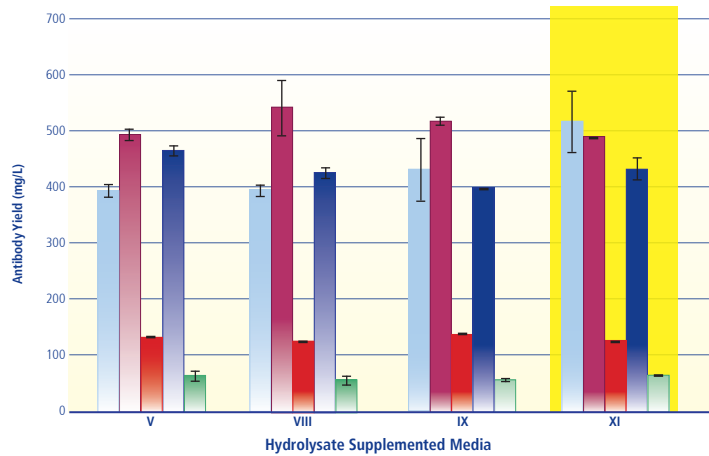
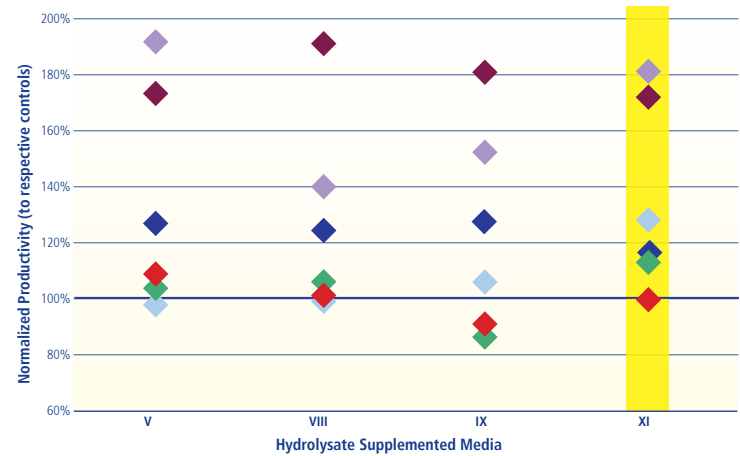


FIGURE 4
Medium Optimization Process Step #4
Antibody Yield Normalized to Respective Controls for Expanded CHO Panel





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Description	Catalog #	Quantity
BD Select™ CHO Medium w/o L-Glutamine*	220253	1L bottle**



* Contains HT to maximize yield from CHO cells.
** Custom packaging up to 200 L also available upon request.



Related Products

Description	Catalog #	Quantity
BD Cell™ MAb Medium, Quantum Yield	220511	1L bottle
BD Cell™ MAb Medium, Serum-Free	220509	1L bottle
BD Cell™ MAb Medium, Animal-Free	220513	1L bottle

For more information, visit us today at bdbiosciences.com/advbio
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